

IN THE CLAIMS:

A complete listing of all pending claims is shown:

1. - 38. (canceled)

39. (currently amended) A mobile handheld instrument configured to capture an image of a target and spatial data for determination of a position of the target, said instrument including:

i. a plurality of measuring devices, the measuring devices including a camera and a plurality of spatial sensors configured to capture spatial data for determination of the position of the target, the spatial sensors including:

a) a compass having one or more magnetic field sensors and being aligned with the camera for determination of a bearing of the mobile instrument by measurement of the Earth's magnetic field;

b) a laser distance meter for determining a distance from the mobile instrument to the target, the laser distance meter being aligned with the camera and compass such that it is directed towards the target when the camera is aligned with the target; and

c) a positioning system for determining a position of the mobile instrument;

ii. a port configured for connection of an external sensor to the mobile instrument;

ii.iii. an electronic display screen configured to display in real time a view obtained using the camera and to superimpose a marker indicative of a datum position on the displayed view to enable a user to align the mobile instrument with the target;

- ~~iii~~-iv. a first power switch operable to control power to the compass;
- ~~v~~-v. a second power switch operable to control power to one or more other measuring devices;
- vi. a power controller ~~capable of~~configured to asynchronously ~~operating~~operate the first and second power switches so as to asynchronously obtain data from the compass and one or more other spatial sensors in response to a single user instruction to take a reading;
- vii. a plurality of user interface devices including: a microphone and one or more of a touch screen and a keypad; and
- ~~vi~~-viii. memory configured to store data obtained from the measuring devices and user interface devices;

wherein the mobile instrument is configured to obtain an image from the camera and data from each spatial sensor in response to the single user instruction to take a reading and store the image and data in the memory, associating the data with the image; and immediately following the acquisition of the image and data, the mobile instrument is configured to automatically seek user input metadata via one or more of the user interface devices and to store the user input metadata in the memory, associating the user input metadata with the stored image and data.

40. (original) A mobile instrument according to claim 39 wherein the power controller is at least partially integrated with one of the measuring devices.

41-42. (canceled)

43. (original) A mobile instrument according to claim 39 wherein the power controller includes one or more power control lines for controlling the power switches, a camera data line coupled to the camera and one or more sensor data lines each coupled to a

respective spatial sensor.

44. (canceled)

45. (previously presented) A mobile instrument according to claim 39 wherein the one or more spatial sensors include one or more of: a distance meter, a global position sensor and an orientation sensor.

46-78. (canceled)

79. (previously presented) A mobile instrument according to claim 39 wherein the power controller includes a processor, and a device for controlling the supply of power to the processor.

80. (previously presented) A mobile instrument according to claim 40 wherein the power controller includes a processor, and a device for controlling the supply of power to the processor.

81 (previously presented) A mobile instrument according to claim 80 wherein the device for controlling the supply of power to the processor is a monostable device.

82. (previously presented) A mobile instrument according to claim 39 wherein the power controller includes two or more handshaking lines, each coupled to a respective power switch.

83. (previously presented) A mobile instrument according to claim 39 including: a port able to be connected to an external sensor from which the mobile instrument may obtain further information; and a third power switch to control power to the port, the

power controller being capable of asynchronously controlling the first, second and third power switches.

84. (previously presented) A mobile instrument according to claim 39 wherein the measuring devices include a distance meter, a global position sensor and an orientation sensor, and the mobile instrument further includes a display screen.

85. (previously presented) A mobile instrument according to claim 39 wherein the power controller is a central processing platform which also receives data from the measuring devices.

86. (previously presented) A mobile instrument according to claim 39 wherein the controller is arranged to control the power switches to provide power to a measuring device when it is required to provide data and not to provide power to the measuring device at other times.